

WHAT IS CLAIMED IS:

1. A humidity sensor comprising an insulating substrate, and a lower electrode, a moisture sensitive layer and an upper electrode successively formed on the insulating substrate, wherein the lower electrode comprises a noble metal, the upper electrode comprises a noble metal porous body, and the
5 upper electrode is joined to the moisture sensitive layer and a portion of the insulating substrate.

2. The humidity sensor as claimed in claim 1, wherein the lower electrode or the upper electrode predominantly contains platinum.

3. The humidity sensor as claimed in to claim 1, wherein the lower electrode comprises a porous body.

4. The humidity sensor as claimed in claim 1, comprising a heater provided in the insulating substrate.

5. The humidity sensor as claimed in claim 1, comprising a temperature measurement resistor provided in the insulating substrate.

6. The humidity sensor as claimed in claim 4, wherein the heater is located directly below the moisture sensitive layer.

7. The humidity sensor as claimed in claim 5, wherein the temperature measurement resistor is located directly below the moisture sensitive layer.

8. The humidity sensor as claimed in claim 1, adapted for measuring humidity in an atmosphere containing a very small amount of oxygen and containing a reducing gas.